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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,907	05/22/2002	Christine J. Phillips	124078-1 (GP4-0022)	4392
23413	7590	12/07/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			FERRIS III, FRED O	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/063,907	Applicant(s) PHILLIPS ET AL.	
	Examiner Fred Ferris	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/5/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. *Claims 1-25 have been presented for examination based on applicant's disclosure filed 22 May 2002. Claims 1-25 stand rejected by the examiner.*

Drawings

2. *Applicant's drawings submitted on 8 July 2002 have been approved by the examiner.*

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. *Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.*

Specifically, independent claims 1, 15, 18-23, and 25 recite limitations relating to a graphical representation of a chemical design structure including a chemical backbone structure, and a chemical substituent which includes attaching the graphical representations to a selected backbone structure based on a permissible location, and a multi-dimensional graphics component for viewing the structured properties. However,

the specification appears to be silent on specifically how the invention creates the graphical representation of the chemical design structure, how the permissible locations for attaching chemical substituents are determined, or how the multi-dimensional graphics component for dimensioned viewing of structured properties is realized.

Hence, a skilled artisan would not know how to make and/or use the claimed subject matter without undue experimentation. Dependent claims inherit the defects of the claims from which they depend.

Claim Interpretation

4. *As noted above, the invention's actual implementation of the claimed features relating to the user interface, database, graphical representation of chemical structures, and multi-dimensional graphics component and have not been sufficiently described in the specification. Therefore, for purposes of art rejections, the examiner assumes that these features have been implemented using one the popular commercially available chemical structure drawing software packages such as ChenDraw, ChemWindow, ISIS/Draw, or ChemSketch.*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-4, 6, 7, and 12-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2002/0129004 A1 issued to Bassett et al in view of "ADC/Chem Sketch", Version 5.0 Users Guide, Advanced Chemistry Development Inc., 2001. (hereafter: ChemSketch)

Independent claim 1, for example, merely requires the following elements:

chemical design query tool comprising:

- user interface*
- database storing graphical representation of chemical design structure*
- interface guides user selecting chemical design structure and submitting structure to provider system.*

These limitations, and the claimed elements of independent claim 15, 18-23, and 25 are rendered obvious by the combination of Bassett and ChemSketch using the reasoning set forth below.

Regarding independent claims 1, 15, 18-23, and 25: Bassett discloses an interactive Wizard based chemical design query tool inclusive of a user interface with database for guiding the user in chemical selection (para: 0009, 0010, 0014, Figs. 3C-

3J), transmitting responses, tacking quires (para:0014), and providing a welcome screen and submitting a chemical selection to a provider (vendor) system (para: 0014,0074, 0093, Fig. 8).

Bassett does not explicitly disclose features relating to a graphical representation of a chemical design structure.

ChemSketch discloses a commercially available chemical structure drawing software package inclusive of features for designing a graphical representation of a chemical design structure (Chapters 2, 5, 6, 8-10).

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of Bassett relating to a Wizard based chemical design query tool, with the teachings of ChemSketch relating to a chemical structure drawing software package, to realize the elements of the claimed invention. An obvious motivation exists since, as referenced in the prior art, the use of Wizards in an interactive web based environment is particularly advantageous to the chemical industry in assisting customers in selecting most desirable products without human intervention. (See: Bassett, para: 0003-0007, 0009-0014, especially 0014). Accordingly, a skilled artisan tasked with realizing a system and method for a chemical design query tool, and having access to the teachings of Bassett and ChemSketch, would have knowingly modified the teachings of Bassett with the teachings of ChemSketch (or visa versa) to realize the claimed elements of the present invention.

Regarding dependent claims 2-4, 12, 19, and 24: *ChemSketch teaches a software tool allowing a user to create (specify) a graphical representation of custom*

chemical structures (Chapters 2, 5, 6, 8-10, backbone/substituent, etc.) inclusive of features for selecting chemical structures that have are custom designed by a user, crating text windows for specifying custom chemical design parameters, and defining attachment points (receptors) for to the chemical design structure (Chapters 2, 5, 6, 8-10). Bassett teaches an interactive Wizard (para: 0010) for guiding a user through a selection process as noted above.

Regarding dependent claims 6, 7, 13, and 14: *The ChemSketch software tool provides chemical structure features for selecting organic and inorganic structures, dynamic HTML multi-dimensional structure properties viewing, and polymeric (silicones) materials (Chapters 2, 5, 6, 8-10).*

Regarding dependent claims 16, 17: *Bassett teaches providing a URL link to vendor network system (para:0014) and customer registration, contact, and tracking data (Figs. 3-5, 11-15)*

6. Claims 5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable in further view “Introducing Macromedia Flash 5”, D. Cook, PC Support Advisor Update 150, pp. 9-12, May 2001.

Regarding dependent claims 5, 8-11: *Davis teaches the commercially available Macromedia Flash Version 5 providing animated web based host features inclusive of features such as positions, poses, speech, sound, text bubbles, animated movements and facial expressions and, hence, would have knowingly been incorporated by a skilled artisan using the same reasoning previously set forth above.*

Conclusion

7. *The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.*

US Patent Application Publication 2001/0047398 A1 issued to Rubenstein teaches chemical structure design tools and online interactive applications.

US Patent Application Publication 2003/0097305 A1 issued to Ogino et al teaches chemical structure design tools and online interactive applications.

US Patent 6,654,736 issued to Ellis et al teaches chemical structure design tools and online interactive applications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached at 571-272-2279. The Official Fax Number is: (703) 872-9306

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